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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STEVEN E. ARTHUR, CHRISTOPHER L. TOOMER,  
SARAH OWEN, and THEODORE VANDEBURG

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Appeal 2015-005407<sup>1</sup>  
Application 11/830,436<sup>2</sup>  
Technology Center 3600

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Before NINA L. MEDLOCK, BRUCE T. WIEDER, and  
MATTHEW S. MEYERS, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> Our decision references Appellants' Appeal Brief ("App. Br.," filed January 6, 2015) and Reply Brief ("Reply Br.," filed April 27, 2015), and the Examiner's Answer ("Ans.," mailed March 5, 2015) and Final Office Action ("Final Act.," mailed July 7, 2014).

<sup>2</sup> Appellants identify First Data Corporation as the real party in interest. App. Br. 3.

## CLAIMED INVENTION

Appellants' claimed invention "generally relate[s] to payment systems," and, more particularly, to "payment systems supporting use of mobile electronic devices in various types of financial transactions" (Spec. ¶ 4).

Claims 1, 13, and 25 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of processing a financial transaction, the method comprising:

generating, by a first mobile device and a second mobile device, in combination, a unique identifier associated with the financial transaction,

receiving at a first acquirer system a first communication from the first mobile device, the first communication related to the financial transaction and including:

information identifying a first financial account from which a payment is requested;

the unique identifier; and

an identity credential from the first mobile device;

receiving at the first acquirer system from the second mobile device a second communication, the second communication related to the financial transaction and including the unique identifier and information identifying a second, different financial account to which the payment is directed, the first acquirer system operated by an acquirer entity that processes transactions against the second financial account;

identifying with the first acquirer system a second acquirer system for authorizing the financial transaction, wherein the second acquirer system is identified from a plurality of second acquirer systems based on the information identifying the first financial account, wherein the second acquirer system is operated by an acquirer entity that processes transactions against the first financial account;

sending the first communication from the first acquirer system to the second acquirer system for:

determining whether to authorize and initiate the financial transaction based on the information identifying the first financial account; and

determining whether to authenticate the first mobile device and a user of the first mobile device based on the identity credential;

receiving at the first acquirer system from the second acquirer system, (1) an indication the financial transaction is authorized or is not authorized, based on the information identifying the first financial account, and (2) an indication that first mobile device and the user of the first mobile device are authentic or are not authentic, based on the identity credential; and

initiating payment from the first financial account to the second financial account in response to determining that the financial transaction is authorized and that the first mobile device and the user of the first mobile device are authentic.

## REJECTIONS

Claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter that Appellants regard as the invention.

Claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–3, 5, 13–15, and 17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Boylan et al. (US 2003/0028484 A1, pub. Feb. 6, 2003) hereinafter “Boylan”), Goldthwaite et al. (US 2004/0019564 A1, pub. Jan. 29, 2004) (hereinafter “Goldthwaite”), Young (US 2002/0065774 A1,

pub. May 30, 2002), Chapeta (US 2007/0094113 A1, pub. Apr. 26, 2007), Levchin et al. (US 7,089,208 B1, iss. Aug. 8, 2006) (hereinafter “Levchin”), and Ritter et al. (US 6,934,689 B1, iss. Aug. 23, 2005) (hereinafter “Ritter”).

Claims 8–12 and 20–24 are rejected under 35 U.S.C. § 103(a) as unpatentable over Boylan, Goldthwaite, Young, Chapeta, Levchin, Racov (US 2002/0152179 A1, pub. Oct. 17, 2002), and Ritter.

Claims 25–27, 29, and 37 are rejected under 35 U.S.C. § 103(a) as unpatentable over Boylan, Goldthwaite, Young, Chapeta, Levchin, Hinh et al. (US 2001/0042026 A1, pub. Nov. 15, 2001) (hereinafter “Hinh”), and Ritter.

Claims 32–36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boylan, Goldthwaite, Young, Chapeta, Levchin, Hinh, Racov, and Ritter.

## ANALYSIS

### *Written Description*

#### *Independent Claim 1 and Dependent Claims 2, 3, 5, 8–12, and 37*

Whether a specification complies with the written description requirement of 35 U.S.C. § 112, first paragraph, is a question of fact and is assessed on a case-by-case basis. *See, e.g., Purdue Pharma L.P. v. Faulding, Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) (citing *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1561 (Fed. Cir. 1991)). The disclosure, as originally filed, need not literally describe the claimed subject matter (i.e., using the same terms or *in haec verba*) in order to satisfy the written description requirement. But the Specification must convey with reasonable clarity to those skilled in the art that, as of the filing date, Appellants were in possession of the claimed invention. *See id.*

In rejecting independent claim 1 under 35 U.S.C. § 112, first paragraph, the Examiner identifies several limitations of claim 1 as lacking the requisite written description support in the Specification (Final Act. 5–8). Addressing these limitations in turn, the Examiner first asserts that the Specification lacks written description support for “the first acquirer system [being] operated by an acquirer entity that processes transactions against the second financial account” and “wherein the second acquirer system is operated by an acquirer entity that processes transactions against the first financial account,” as recited in claim 1 (*id.* at 5). However, at the same time, the Examiner acknowledges that the Specification discloses that the first acquirer system processes an authorization request associated with the second financial account (*id.* (citing Spec. ¶ 137)), and that the second acquirer system processes an authorization request associated with the first financial account (*id.* at 6 (citing Spec. ¶ 137)). The Examiner ostensibly maintains that the written description requirement is not met because the acquirer systems “not only” perform the recited functions, but also perform other functions relative to the accounts (*see id.* at 5–7). But that is insufficient basis for finding that the written description requirement is not met where, as here, the Specification plainly conveys that Appellants were in possession of the identified limitation at the time the application was filed.

The Examiner also maintains that the Specification lacks written description support for:

    sending the first communication from the first acquirer system to the second acquirer system for:

        determining whether to authorize and initiate the financial transaction based on the information identifying the first financial account; and

determining whether to authenticate the first mobile device and a user of the first mobile device based on the identity credential[.]

as recited in claim 1 (*id.* at 7–8). However, we agree with Appellants that written description support for this limitation is found in the Specification at least in paragraphs 9, 136, and 137 (*see* App. Br. 9).

We also do not agree that written description support is lacking for “initiating payment from the first financial account to the second financial account in response to determining that the financial transaction is authorized and that the first mobile device and the user of the first mobile device are authentic,” as recited in claim 1 (Final Act. 8). In our view, the Specification includes the requisite written description support at least in paragraphs 110, 136, 137.

In view of the foregoing, we do not sustain the Examiner’s rejection of independent claim 1 under 35 U.S.C. § 112, first paragraph. For the same reasons, we also do not sustain the rejection of dependent claims 2, 3, 5, 8–12, and 37.

*Independent Claims 13 and 25 and Dependent Claims 14, 15, 17, 20–24, 26, 27, 29, and 32–36*

Independent claims 13 and 25 include language substantially similar to the language of claim 1. And the Examiner’s rejection of claims 13 and 25 as failing to comply with the written description requirement is based on the same rationale applied with respect to claim 1 (Final Act. 8–9).

Therefore, we do not sustain the Examiner’s rejection under 35 U.S.C. § 112, first paragraph, of independent claims 13 and 25, and claims 14, 15, 17, 20–24, 26, 27, 29, and 32–36, which depend therefrom, for the same reasons set forth above with respect to claim 1.

*Indefiniteness*

*Independent Claim 1 and Dependent Claims 2, 3, 8–12, and 37*

In rejecting independent claim 1 under 35 U.S.C. § 112, second paragraph, the Examiner takes the position that claim 1 is “incomplete for omitting essential elements/steps, such omission amounting to a gap between the elements/steps” (Final Act. 9). The Examiner ostensibly maintains that claim 1 fails to recite all of the steps that are involved when the second acquirer authorizes a financial transaction (*see id.* at 9–10). But we fail to see why, and the Examiner does not adequately explain why, a person of ordinary skill in the art would be unable to determine the metes and bounds of the claim, which is the test for indefiniteness. *See In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989) (During examination, after applying the broadest reasonable interpretation to the claim, if the metes and bounds of the claimed invention are not clear, the claim is indefinite and should be rejected); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (The test for definiteness under 35 U.S.C. § 112, second paragraph is whether “those skilled in the art would understand what is claimed when the claim is read in light of the specification.”).

We also cannot agree with the Examiner that “initiating payment from the first financial account to the second financial account in response to determining that the financial transaction is authorized and that the first mobile device and the user of the first mobile device are authentic,” as recited in claim 1, is unclear or that this limitation, otherwise, renders claim 1 indefinite (Final Act. 10). Instead, we find that a person of ordinary skill in the art would understand what is claimed when the claim is read in light of the Specification, namely, that payment is initiated in response to



determining that the financial transaction is authorized and also determining that the first mobile device and the user of the first mobile device are authentic.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 112, second paragraph. For the same reasons, we also do not sustain the rejection of dependent claims 2, 3, 8–12, and 37.

*Dependent Claim 5*

Claim 5 depends from claim 1, and recites that the claimed method further comprises, *inter alia*, “sending the payment notification message from the second acquirer system to the system maintaining the second financial account.” The Examiner “questions” whether claim 5 “is referencing ‘initiating payment from the first [financial] account to the second [financial] account’ of Claim 1” (Final Act. 10). But the Examiner does not adequately explain why, and we fail to see why, a person of ordinary skill in the art would not understand what is claimed when claim 5 is read in light of the Specification.

Therefore, we do not sustain the Examiner's rejection of dependent claim 5 under 35 U.S.C. § 112, second paragraph.

*Independent Claims 13 and 25 and Dependent Claims 14, 15, 17, 20–24, 26, 27, 29, and 32–36*

The Examiner's rejects claims 13 and 25 based on the same “omitted elements/steps” rationale, which we found unpersuasive with respect to claim 1 (Final Act. 10–11). The Examiner also maintains, with respect to claim 13 that it is unclear whether “communications” in the second wherein clause is referencing (1) the “first communication” and the “second

communication” or (2) different “communications” (*id.* at 11), and the Examiner “questions,” with respect to “receiving . . . an approval message with an indication the financial transaction is authorized or is not authorized,” as recited claim 25, “how the financial transaction can be approved, yet not authorized” (*id.*).

In our view, a person of ordinary skill in the art would understand what is claimed when claims 13 and 25 are read in light of the Specification, namely, that “communications” in claim 13 refers to the first and second communications, and that, in claim 25, a message is received that indicates that the financial transaction is either authorized or not authorized.

In view of the foregoing, we do not sustain the Examiner’s rejection under 35 U.S.C. § 112, second paragraph, of independent claims 13 and 25, and claims 14, 15, 17, 20–24, 26, 27, 29, and 32–36, which depend therefrom.

#### *Non-Statutory Subject Matter*

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1300 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 134 S. Ct.

at 2355. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” *id.*, e.g., to an abstract idea. If the claims are not directed to a patent-ineligible concept, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice Corp.*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1297).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 132 S. Ct. at 1293. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Here, in rejecting claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 under 35 U.S.C. § 101, the Examiner finds that independent claims 1, 13, and 25 are directed to initiating an authorized payment between financial accounts, i.e., to a fundamental economic practice and, therefore, to an abstract idea; and that the additional elements or combination of elements in the claims require no more than (1) generic computer(s) to perform generic computer functions (e.g., generating data, receiving data/communications, sending data/communications) that are well-understood, routine, and conventional activities previously known to the industry and/or 2) mere instructions to implement the idea on a computer (Final Act. 12–13).

Appellants argue that the claims recite “significantly more than . . . initiating [an] authorized payment between financial accounts,” and that the Examiner has misapplied the law, as stated in *Alice*, and by the Federal Circuit in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) (App. Br. 11). Appellants assert that claim 1, for example, recites a “second acquirer system” and “numerous communications between the first and second mobile devices and the first and second acquirer systems for purposes of identifying the first and second accounts, and for the second acquirer system to authorize and authenticate transactions” (*id.* at 11–12), which Appellants maintain “are not ‘generically recited’ devices and ‘generic computer functions’” (*id.* at 12). Yet there is no indication in the Specification that any specialized hardware is required. To the contrary, the Specification states that “an acquirer system can be considered to be any system capable of receiving a communication from another system or entity and processing information on behalf of that entity” (Spec. ¶ 46; *see also id.* ¶ 146 (“It should also be appreciated that the methods described above may be performed by hardware components or may be embodied in sequences of machine-executable instructions, which may be used to cause a machine, such as a general-purpose . . . processor . . . programmed with the instructions, to perform the methods.”)), and that the term “mobile device” refers to “any small, likely handheld, electronic device that can be used to initiate or otherwise participate in a financial transaction” (*id.* ¶ 49). Appellants also cannot reasonably deny that generating data, receiving data/communications, and sending data/communications are generic computer functions.

Appellants further assert that the claims “address the problem of conducting transactions between mobile devices where there is the need to handle multiple accounts that are separate from each other and . . . a need for a reduced number of different forms of payment to be carried by a consumer” (App. Br. 12 (citing Spec. ¶¶ 6, 8)), and posit “[t]his is not a ‘computer network operating in its normal, expected manner,’ as noted in *DDR Holdings*” (*id.*). But Appellants do not explain how or why there is any parallel between the claims here at issue and those in *DDR Holdings*, which the Federal Circuit concluded were directed to statutory subject matter because they claimed a solution “*necessarily rooted in computer technology* in order to overcome a problem specifically arising in the realm of computer networks.” *DDR Holdings*, 773 F.3d at 1257.

Finally, we are not persuaded of Examiner error by Appellants’ argument that the “claims at issue do not attempt to preempt every application of the idea of ‘initiating [an] authorized payment between financial account” (App. Br. 12). There is no dispute that the Supreme Court has described “the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption.” *Alice*, 134 S. Ct. at 2354. But characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing pre-emption as the sole test for patent eligibility. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). But although “preemption may signal patent ineligible

subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

We are not persuaded for the reasons set forth above that the Examiner erred in rejecting claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection.

*Obviousness*

We are not persuaded by Appellants’ argument that the Examiner erred in rejecting independent claims 1, 13, and 25 under 35 U.S.C. § 103(a) because Ritter, on which the Examiner relies, does not disclose or suggest “generating, by a first mobile device and a second mobile device, in combination, a unique identifier associated with the financial transaction,” as recited in claim 1, and similarly recited in claims 13 and 25 (App. Br. 12–13). The Examiner takes the position that Ritter meets the claim language because:

Ritter’s (‘689) payee device generates a transaction identification containing its payee device identification [column 5, lines 33–35] and transmits, via a contactless interface, said transaction identification to a payer device [column 6, lines 29–32] wherein, in response, Ritter’s (‘689) payer device adds its payer device identification to the transaction identification and transmits, via the contactless interface, the combination back to the payee device [column 6, lines 41–43 & 51–58].

Final Act 18. We agree.

Ritter is directed to a payment transaction system and method, and discloses, with reference to Figure 1, a point-of-sale (“POS”) location 5; a plurality of payment terminals 2 are located at POS 5, along with a plurality of mobile devices 1 carried by customers (Ritter, col. 4, ll. 38–45). The mobile devices have a contactless device interface 11 for communicating

with corresponding contactless device interfaces of payment terminals 2 (*id.*, col. 4, ll. 46–51). Ritter discloses that payment terminals 2 comprise a transaction identification module that establishes a transaction identification for a particular payment transaction; the transaction identification number includes a payment terminal identification (for at least one of the plurality of payment terminals 2) and a transaction number that is incremented progressively, e.g., with each new payment transaction (*id.*, col. 5, ll. 30–40). If the customer wishes to use his/her mobile device to pay the amount of the payment transaction, after successful authentication, the customer selects the “payment transaction” function on the mobile device, after which the customer is prompted by a transaction response module of the mobile device to enter the transaction identification for the payment transaction (*id.*, col. 6, ll. 7–38). Transaction response module 13 transmits the transaction identification to the payment terminal 2 identified by the payment terminal identification, and also adds a sender identification (identifying the mobile device) to the transaction identification for co-transmission (*id.*, col. 6, ll. 39–58).

Appellants argue that the identification of the mobile device and the transaction identification are separately created in Ritter (i.e., the transaction identification is generated by the payment terminal and the mobile device identification is generated by the mobile device) and that the mobile device identification is for purposes of identifying the address of the mobile device (Reply Br. 5; *see also* App. Br. 12–13). However, Appellants do not explain why the combination of the transaction identification and the sender (i.e., mobile) identification does not constitute “a unique identifier associated with

the financial transaction,” generated by the payment terminal and the mobile device, in combination.

In view of the foregoing, we sustain the Examiner’s rejection of independent claims 1, 13, and 25 under 35 U.S.C. § 103(a). We also sustain the rejections of dependent claims 2, 3, 5, 8–12, 14, 15, 17, 20–24, 26, 27, 29, and 32–37, which are not argued separately.

#### DECISION

The Examiner’s rejection of claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 under 35 U.S.C. § 112, first paragraph, is reversed.

The Examiner’s rejection of claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 under 35 U.S.C. § 112, second paragraph, is reversed.

The Examiner’s rejection of claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 under 35 U.S.C. § 101 is affirmed.

The Examiner’s rejections of claims 1–3, 5, 8–15, 17, 20–27, 29, and 32–37 under 35 U.S.C. § 103(a) are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED